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## FOOD PRICES AND THE COST OF LIVING

If the present high level of the prices of agricultural products continues, the new generation will need to have explained to them what was meant by the expression "the poor farmer." The figures given by Secretary Wilson are truly beyond comprehension: \$8,760,000,000<sup>1</sup> is said to be the value of the products of the farm for 1909. The value of the annual crop, of course, depends upon the number of units produced and the price per unit. In the case of a few crops the number of units produced in 1909 was not quite so large as it had been in some previous year, yet generally, because of the higher price per unit, the value of each crop was greater than ever before.

To the consumer, however, the price per unit, not the total value, is the significant thing. An effort will here be made to trace the price of the various food products at three different levels, at the farm, at wholesale, and at retail.

### I

The farm values of the crops for the different years are given in the *Yearbook of the Department of Agriculture*. The data for the following table are taken from the *Yearbook* for 1908, pp. 598-675. The tables there presented give the cash value of the crops at the farm on December 1 of each year.

Presumably this farm value is based on the price in the primary markets, less transportation, elevator, inspection, and commission expenses, and so is taken as the best available figure from which to get some idea of the course of farm prices. For purposes of comparison the set of cash prices given in the *Yearbook* has been reduced to a set of index numbers. To make these index numbers comparable with the statistics of the Bureau of Labor the average farm price of each commodity for the years 1890 to 1899 was taken as the base. These index numbers are given in Table I and the movement for five series of them is shown graphically in Chart I.

<sup>1</sup> This is divided as follows: cereal crops \$3,000,000,000, crops other than cereals \$2,700,000,000, and animal products \$3,060,000,000.

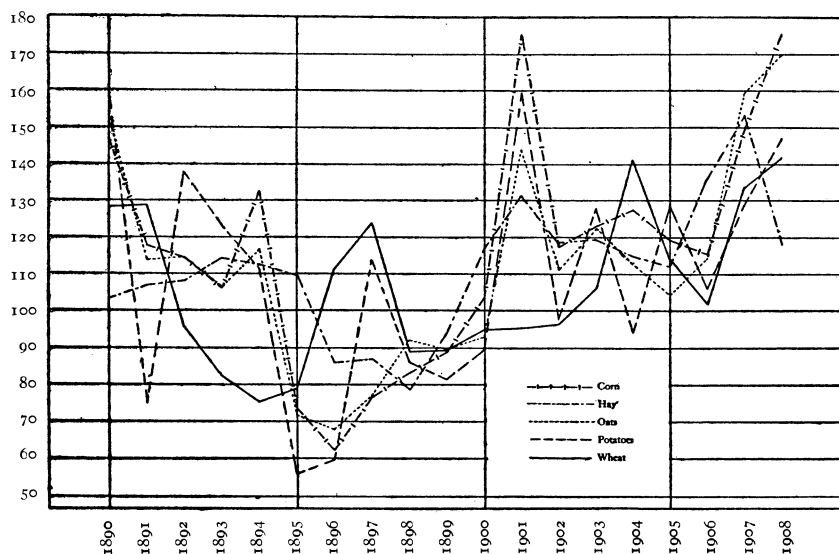
TABLE I

INDEX NUMBERS OF FARM PRICES ON DECEMBER 1 OF EACH YEAR  
(AVERAGE 1890-99=100)

Year	Barley	Corn	Cotton	Hay	Oats	Potatoes	Rye	Wheat
1890.....	144.7	146.7	123.5	103.3	152.7	157.6	120.3	128.2
1891.....	121.0	117.7	104.8	106.6	113.5	74.4	147.9	128.3
1892.....	109.6	114.2	120.5	107.6	114.2	137.4	103.7	95.4
1893.....	94.9	105.8	100.5	113.9	105.9	123.3	98.1	82.3
1894.....	102.0	132.5	66.1	112.1	116.7	111.6	95.8	75.1
1895.....	77.8	73.4	109.1	109.6	71.7	55.3	84.1	77.8
1896.....	74.6	62.3	94.8	86.0	67.4	59.5	78.2	111.0
1897.....	87.0	76.3	94.8	86.9	76.4	113.7	85.5	123.6
1898.....	95.3	83.2	81.9	78.7	91.9	86.1	88.5	89.0
1899.....	93.0	87.8	104.0	94.1	89.7	81.1	97.6	89.3
1900.....	94.2	103.5	.....	116.7	92.9	89.6	97.9	94.7
1901.....	104.1	175.4	.....	131.4	143.7	159.5	106.5	95.4
1902.....	106.0	116.8	118.9	118.9	110.6	97.9	97.1	96.3
1903.....	105.3	123.2	175.5	119.2	122.8	127.7	104.2	106.3
1904.....	97.0	127.9	125.4	114.4	112.7	94.2	131.6	141.3
1905.....	93.0	119.5	158.0	111.8	104.8	128.3	116.9	114.2
1906.....	95.8	115.4	144.7	136.1	114.2	106.2	112.7	102.0
1907.....	153.7	149.6	149.3	153.3	159.6	128.5	139.8	133.7
1908.....	127.9	175.7	124.9	117.8	170.0	146.8	140.8	141.9

An examination of this table will show that while the percentage of increase of price of all commodities for 1908, over the aver-

CHART I. INDEX NUMBERS OF FARM PRICES



age of 1890-99, was, as given by the Bureau of Labor, 22.8, barley advanced 27.9 per cent., corn 75.7 per cent., cotton 24.9 per cent., oats 70 per cent., potatoes 46.8 per cent., rye 40.8 per cent., and wheat 41.9 per cent. Hay, with an increase of 17.8 per cent., is the only one of these agricultural products which is below the general average, and it, in 1907, showed 53.3 per cent. increase as compared with an increase of 29.5 per cent. in all commodities for that year. This tremendous increase in the value of the units together with the great quantity produced gives the enormous value of our crops.

## II

Table II is taken directly from the *Bulletin of the Bureau of Labor*, No. 81 (March, 1909), pp. 338-44. It gives the index numbers of the wholesale prices of the commodities of which we had the farm prices, together with some other items. It is probably of rather more value than the table of prices at the farm, since it is based on actual weekly quotations and does not involve any element of estimate.

TABLE II  
INDEX NUMBERS OF WHOLESALE PRICES OF FARM PRODUCTS  
(AVERAGE 1890-99 = 100)

Year	Barley	Corn	Cotton	Hay	Oats	Potatoes	Rye
1890.....	116.1	103.8	142.9	95.8	115.6	119.3	103.0
1891.....	134.5	151.0	110.8	117.8	144.1	154.9	157.6
1892.....	112.2	118.3	99.0	113.5	113.2	91.1	127.7
1893.....	103.3	104.2	107.2	107.4	105.2	134.5	92.6
1894.....	113.2	113.7	90.2	99.9	115.7	122.8	88.1
1895.....	94.8	104.0	94.0	109.1	88.3	86.7	91.2
1896.....	65.7	67.8	102.0	99.0	67.0	39.4	66.5
1897.....	71.2	66.9	92.2	80.9	69.9	65.7	74.9
1898.....	95.9	82.6	76.9	79.9	91.9	102.1	93.8
1899.....	97.6	87.6	84.7	96.6	91.2	83.6	104.4
1900.....	106.2	100.2	123.8	110.9	84.5	74.9	97.9
1901.....	129.8	130.6	111.1	123.0	118.3	113.0	100.8
1902.....	139.4	156.9	115.1	120.9	147.3	119.4	102.5
1903.....	121.2	121.1	144.7	119.2	131.7	105.2	97.5
1904.....	116.9	132.6	155.9	112.5	135.8	146.3	133.4
1905.....	107.0	131.7	123.1	107.9	111.2	80.7	134.5
1906.....	112.8	121.8	142.0	124.3	122.1	109.7	115.5
1907.....	169.0	138.8	153.0	162.4	167.4	98.4	145.4
1908.....	161.8	179.9	134.8	118.3	189.5	142.6	148.0

TABLE II—Continued

Year	Wheat	Cattle (Steers)	Hogs	Sheep	Butter (Elgin)	Eggs	Flour (Spring Wheat)
1890.....	118.9	91.5	89.6	120.5	103.1	99.1	120.7
1891.....	128.1	110.6	100.2	120.0	115.3	110.0	123.5
1892.....	104.9	95.7	116.8	127.2	116.5	110.4	101.1
1893.....	90.1	103.8	148.4	103.2	118.9	114.5	93.2
1894.....	74.4	97.0	112.7	71.7	101.1	93.5	83.7
1895.....	79.9	103.1	97.0	78.5	95.1	102.0	84.8
1896.....	85.4	86.4	76.1	78.0	82.6	88.7	88.3
1897.....	105.8	98.2	81.4	93.1	84.7	87.5	106.8
1898.....	117.8	101.1	86.2	104.4	86.9	92.6	110.1
1899.....	94.7	112.6	91.5	103.3	95.6	101.6	87.8
1900.....	93.7	108.7	115.2	109.7	100.4	100.7	89.4
1901.....	95.7	115.1	135.0	89.2	97.4	106.7	88.7
1902.....	98.7	140.4	158.0	100.6	111.2	122.7	88.6
1903.....	105.1	104.7	137.3	98.7	106.1	123.2	100.8
1904.....	138.3	112.0	116.8	110.3	100.4	135.0	125.2
1905.....	134.5	112.2	119.9	134.5	111.9	138.2	126.2
1906.....	105.6	115.2	141.3	131.7	113.3	133.2	99.5
1907.....	120.8	123.0	137.8	130.3	127.2	141.2	113.5
1908.....	131.8	128.1	131.4	112.3	124.1	142.0	126.1

Again, as compared with an increase of 22.8 per cent. in all commodities in 1908 over the average of 1890-99, we find that barley has risen 61.8 per cent., corn 79.9 per cent., cotton 34.8 per cent., oats 89.5 per cent., potatoes 42.6 per cent., rye 48 per cent., wheat 31.8 per cent., steers 28.1 per cent., hogs 31.4 per cent., butter 24.1 per cent., eggs 42 per cent., flour 26.1 per cent. Hay again, with an increase of 18.3 per cent., is lower than the average of all commodities, as are sheep, with an increase of 12.3 per cent. It is to be noticed that in general these index numbers for 1908 are higher than the corresponding index numbers for the farm values. But no deduction as to the margin between the farm and the wholesale price can be drawn since, obviously, it would not be fair to compare an average price for the year with the price of a single date.

We have, then, compared, for particular years, the index number of all commodities with the index numbers of these various products. An interesting table is one comparing the index numbers for the wholesale price of all commodities with those for the wholesale prices of farm products and food.

This is taken from the *Bulletin of the Bureau of Labor*, No. 81 (March, 1909), p. 207. A safe generalization is that since 1900 farm products have been above the average of all commodities and

TABLE III  
INDEX NUMBERS OF FARM PRODUCTS, FOOD, AND ALL COMMODITIES  
(AVERAGE 1890-99 = 100)

Year	Farm Products	Food	All Commodities
1890.....	110.0	112.4	112.9
1891.....	121.5	115.7	111.7
1892.....	111.7	103.6	106.1
1893.....	107.9	110.2	105.6
1894.....	95.9	99.8	96.1
1895.....	93.3	94.6	93.6
1896.....	78.3	83.8	90.4
1897.....	85.2	87.7	89.7
1898.....	96.1	94.4	93.4
1899.....	100.0	98.3	101.7
1900.....	109.5	104.2	110.5
1901.....	116.9	105.9	108.5
1902.....	130.5	111.3	112.9
1903.....	118.8	107.1	113.6
1904.....	126.2	107.2	113.0
1905.....	124.2	108.7	115.9
1906.....	123.6	112.6	122.5
1907.....	137.1	117.8	129.5
1908.....	133.1	120.6	122.8

food products have been below the average. The high level of prices in the groups fuel and lighting, metals and implements, and lumber and building materials, has helped to keep the general average high. We cannot make a similar comparison of prices at retail, since retail food prices are the only retail prices collected. So there is no general retail index number comparable with the general index number of wholesale prices.

### III

Retail prices next engage our attention. They will first be taken up in index numbers and then an attempt will be made to get at the actual margin between wholesale and retail prices. On p. 195 of *Bulletin No. 77* of the Bureau of Labor (July, 1908) is given a table of the relative wholesale and retail prices of food. It is here reproduced as Table IV, and is shown graphically in Chart II. In this chart the index number for all commodities at wholesale, as given by the Bureau of Labor, is added for comparison.

The wholesale price is an average of the index numbers of fifty-three articles for part of the time and fifty-four for the

TABLE IV  
RELATIVE WHOLESALE AND RETAIL PRICES OF FOOD IN THE UNITED STATES  
1890 TO 1907\* (AVERAGE 1890-99 = 100)

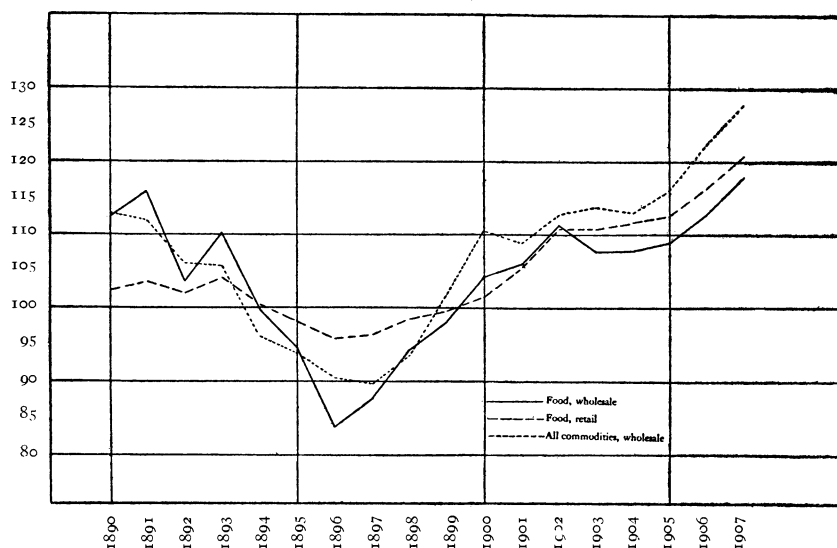
Year	Wholesale	Retail	Year	Wholesale	Retail
1890.....	112.4	102.1	1899.....	98.3	99.6
1891.....	115.7	103.4	1900.....	104.2	101.5
1892.....	103.6	101.8	1901.....	105.9	105.5
1893.....	110.2	104.1	1902.....	111.3	110.9
1894.....	99.8	100.3	1903.....	107.1	110.9
1895.....	94.6	98.2	1904.....	107.2	111.6
1896.....	83.8	95.8	1905.....	108.7	112.5
1897.....	87.7	96.3	1906.....	112.6	116.2
1898.....	94.4	98.5	1907.....	117.8	120.7

\*The fact that in 1890 the index number of wholesale prices was 112.4 while that of retail prices was only 102.1 might be taken to indicate that the wholesale price was above the retail price. To escape such errors as these, great care must be used in arguing from two sets of index numbers, for index numbers are percentages and so the absolute numbers for which they stand depend not only on the percentage but also upon the magnitude of the base of which the index number is a percentage. The relation of index numbers to the absolute numbers may be illustrated by a little table of index numbers based on some hypothetical wholesale and retail prices. The base of each series is the average of the five items composing it:

Wholesale Prices	Retail Prices	Wholesale Price Index	Retail Price Index
\$0.07	\$0.10	140	100
.06	.08	120	80
.03	.12	60	120
.04	.11	80	110
.05	.09	100	90

It is seen, then, that it is possible for the index number of the wholesale price to be 140 while the index number of the retail price is 100 and yet still have the absolute wholesale price lower than the retail price, which of course, it always must be.

CHART II. INDEX NUMBERS OF FOOD PRICES, WHOLESALE AND RETAIL, AND OF ALL COMMODITIES, WHOLESALE



remainder of the time. The retail prices are for the average of thirty articles. The wholesale prices are based on weekly quotations in one city, usually New York or Chicago. On the other hand, the retail prices are the average of monthly quotations from 1,014 dealers in 68 localities. On account of these differences the index numbers are not comparable except on the supposition that the thirty articles fairly represent the movement of retail prices and that the fifty-three or fifty-four articles fairly represent the movement of wholesale prices. We shall make that assumption.

Several facts shown by the table are worthy of note. It is seen that the wholesale prices fluctuate more widely than the retail prices. In the fluctuations of wholesale prices there is a range of 34 per cent., while in the retail price-fluctuations the range is 24.9 per cent. This difference is to be explained in the usual way, on the ground that custom has more to do with the fixing of retail prices and that there is more inertia to overcome in effecting a change.

It is rather dangerous to attempt to draw conclusions from percentages of different bases, as was indicated in the preceding note, but it is probably safe to say that if the index number of wholesale food prices increases from 104.2 in 1900 to 117.8 in 1907, an increase of 13.6 per cent., while during the same period retail food prices increased from 101.5 to 120.7, an increase of 19.2 per cent., the presumption would be that there had been an increase in the margin between wholesale and retail prices. This may be stated algebraically as follows: If we let  $x$  represent the base of the wholesale prices (that would be the average price of units of all commodities for 1890 to 1899), and  $x+d$  represent the base of retail prices, since retail prices are always higher than wholesale, we can get expressions for the margins. The margin in 1900 would be the retail price  $1.015(x+d)$  less the wholesale price  $1.042x$ . This may be simplified into  $1.015d - .027x$ . In the same way the margin in 1907 would be  $1.207(x+d)$  less  $1.178x$  or in simpler form  $1.207d + .029x$ . Now since  $x$  and  $d$  are both positive this latter margin must be greater.

Table V gives the index numbers for several products at retail. These products correspond roughly to some of those in Table II. The figures are taken from the *Bulletin of the Bureau of Labor*, No. 77 (July, 1908). These are products which are quite closely



TABLE V  
INDEX NUMBERS OF RETAIL PRICES (AVERAGE 1890-99 = 100)

Year	Beefsteak	Fresh Pork	Fresh Mutton	Butter	Eggs	Flour	Cornmeal	Potatoes
1890.....	98.8	97.0	100.7	99.2	100.6	109.7	100.0	109.3
1891.....	99.4	98.7	100.6	106.4	106.9	112.5	109.7	116.6
1892.....	99.3	100.5	101.0	106.8	106.8	105.1	105.2	95.7
1893.....	99.6	107.0	99.9	109.9	108.1	96.1	103.1	112.3
1894.....	98.2	101.8	97.8	101.7	96.3	88.7	102.2	102.6
1895.....	99.1	99.7	98.7	97.0	99.3	89.0	100.8	91.8
1896.....	99.5	97.4	98.7	92.7	92.8	92.7	95.0	77.0
1897.....	100.2	97.6	99.6	93.1	91.4	104.3	93.7	93.0
1898.....	102.0	98.6	100.4	95.1	96.2	107.4	95.0	105.4
1899.....	103.9	101.7	102.6	97.7	101.1	94.6	95.1	96.1
1900.....	106.4	107.7	105.6	101.4	99.9	94.3	97.4	93.5
1901.....	111.0	117.9	109.0	103.2	105.7	94.4	107.1	116.8
1902.....	118.5	128.3	114.7	111.5	119.1	94.9	118.8	117.0
1903.....	112.9	127.0	112.6	110.8	125.3	101.2	120.7	114.8
1904.....	113.4	124.0	114.1	109.0	130.9	119.9	121.5	121.3
1905.....	112.9	126.6	117.8	112.7	131.6	119.9	122.2	110.2
1906.....	116.5	137.7	124.1	118.2	134.2	108.1	123.2	114.4
1907.....	120.6	142.5	130.1	127.6	137.7	117.7	131.6	120.6

connected with the farm and in general for 1907 it will be noticed that they are higher than the average retail index number for that year, which was 120.7.

Secretary Wilson, in his annual report for the year 1909, discusses the question of the prices at the various stages from the farm to the consumer. His chief concern is to ascertain what share the farmer has had in the increase. He uses as the base of his index numbers the average of the years 1896 to 1900. As these would not be comparable with the index number already given above, perhaps it will be sufficient to give his conclusions without giving the data upon which they are based.

In the upward movement of beef prices under the circumstances described, the farmer has not shared equally with packer, wholesaler, and retail dealer. His raw cattle are barely as valuable as they were nine to fourteen years ago, and, had not the price of corn ascended to a high figure, perhaps he would not have shared in the least in higher beef prices. As it is he is getting a share through feeding corn, but not as much on this account as the price of corn demands.

With regard to hogs the case is different. The farmer has received nearly his fair share of the higher prices of pork in the increased price of the unfed hogs, and he gets some of his due in the corn used for

feeding. The price of corn has been too high for the price of pork. . . . [p. 24].

The general fact is that in the upward movement of prices since 1896 the products of the farm have fared better than any other class of commodities, the only large item which is an exception being unfed beef cattle, the farm price of which has now barely begun to rise above the price level of 1896-1900 for beef cattle. . . . [p. 26].

#### IV

Leaving index numbers we will now consider some actual prices. Retail prices are hard to deal with. They are not uniform. Individual retail prices are easy to find out; but on the other hand retail prices vary so much from store to store, or more especially from locality to locality, that it is difficult if not impossible to get what may fairly be called an average retail price. When we attempt to compare the retail prices over a period of time we encounter a new difficulty. As a rule, no record is kept of retail prices. The work of the Bureau of Labor is about the only exception to this statement. Wholesale prices are more nearly uniform and the recording of them is more systematically carried out in the newspapers and the trade journals.

An attempt has been made to see how the margin between the retail and wholesale prices has changed. To do this, the retail price of a commodity for a given city, as stated in the *Bureau of Labor Report on Retail Prices*, has been taken and from it has been subtracted the wholesale price of the same commodity in the same city. Obviously, this method is open to serious objections. The retail prices are given from only a few stores. We cannot be sure that the stores taken are typical stores. It is understood that in choosing these stores the attempt is made to get ones at which laboring men trade, and that so far as possible the same stores are taken year after year. The retail price quotations are usually not very specific as to the grade of the article quoted.

The first case is that of New York City. The results are given in Table VI.

The fourteen articles there given were ones for which quotations for both wholesale and retail prices are given in the *Bulletin of the Bureau of Labor*. Of the three years, 1890, 1896, and 1907, the first and third are taken for illustration because they are

TABLE VI  
COMPARISON OF WHOLESALE AND RETAIL PRICES IN NEW YORK

	1890	1896	1907
Retail: Evaporated apples, per lb. ....	\$0.1200	\$0.1200	\$0.1440
Wholesale: Evaporated apples, per lb. . .	.1136	.0533	.0843
Margin. ....	.0064	.0667	.0597
Percentage of gross profit. ....	5.7	125.1	70.8
Retail: Beans, per qt. ....	.1021	.1006	.1000
Wholesale: Beans ( $\frac{1}{2}$ of bu. price) . . . . .	.0634	.0367	.0556
Margin. ....	.0387	.0639	.0444
Percentage of gross profit. ....	61.4	174.1	79.9
Retail: Bread, per lb. ....	.0500	.0500	.0533
Wholesale: Bread, per lb. ....	.0320	.0287	.0376
Margin. ....	.0180	.0213	.0157
Percentage of gross profit. ....	56.3	74.2	40.8
Retail: Creamery butter, ex. per lb. ....	.2622	.2353	.3085
Wholesale: Creamery butter, ex. per lb. . .	.2276	.1841	.2830
Margin. ....	.0346	.0512	.0255
Percentage of gross profit. ....	15.2	27.8	9.0
Retail: N. Y. dairy butter, per lb. ....	.2156	.1933	.3291
Wholesale: N. Y. dairy butter, per lb. ....	.1954	.1665	.2671
Margin. ....	.0202	.0268	.0620
Percentage of gross profit. ....	10.3	16.1	23.2
Retail: Cheese F. C., N. Y., per lb. ....	.1536	.1544	.1903
Wholesale: Cheese F. C., N. Y., per lb. . .	.0958	.0908	.1414
Margin. ....	.0578	.0636	.0489
Percentage of gross profit. ....	60.3	70.0	34.6
Retail: Cornmeal, yellow, per lb. ....	.0210	.0208	.0350
Wholesale: Cornmeal, yellow, per lb. ....	.0102	.0079	.0136
Margin. ....	.0108	.0120	.0214
Percentage of gross profit. ....	105.9	163.4	150.7
Retail: Eggs, nearby, fresh, per doz. ....	.2284	.1970	.3341
Wholesale: Eggs, new laid, per doz. ....	.1945	.1741	.2771
Margin. ....	.0239	.0238	.0570
Percentage of gross profit. ....	12.3	13.7	20.6
Retail: Milk, fresh, per qt. ....	.0588	.0571	.0656
Wholesale: Milk, fresh, per qt. (freight not counted) . . . . .	.0263	.0234	.0335
Margin. ....	.0325	.0337	.0321
Percentage of gross profit. ....	123.6	144.0	95.8
Retail: N. O. molasses, per gal. ....	.5292	.4829	.5806
Wholesale: N. O. molasses, per gal. ....	.3542	.3246	.4088
Margin. ....	.1750	.1583	.1718
Percentage of gross profit. ....	49.7	45.7	42.0
Retail: Prunes, 50s-60s, per lb. ....	.1400	.0883	.1217
Wholesale: Prunes, 60s-70s, per lb. ....	.1068	.0581	.0593
Margin. ....	.0332	.0302	.0624
Percentage of gross profit. ....	31.1	52.0	105.2
Retail: Rice, per lb. ....	.0876	.0750	.0852
Wholesale: Rice, per lb. ....	.0605	.0519	.0534
Margin. ....	.0271	.0231	.0318
Percentage of gross profit. ....	44.8	44.5	59.5

TABLE VI—*Continued*

	1890	1896	1907
Retail: Sugar, gran., per lb.....	.0704	.0508	.0567
Wholesale: Sugar, gran., per lb.....	.0617	.0453	.0465
Margin.....	.0087	.0055	.0102
Percentage of gross profit.....	14.1	12.1	21.9
Retail: Vinegar, cider (by qt.), per gal....	.2796	.2680	.2534
Wholesale: Vinegar, cider, per gal.....	.1558	.1300	.1725
Margin.....	.1238	.1380	.0809
Percentage of gross profit.....	79.5	106.2	47.0

respectively the first and last years covered by the investigation of the Bureau of Labor. The year 1896 is taken because it represents the lowest point in the course of prices as a result of the panic of 1893. These figures must not be taken too absolutely, for we cannot be sure that the wholesale and retail prices were for exactly the same quality. However, the percentage of gross profit should indicate the general course of the margin. Eight out of fourteen articles show an increase in 1907 over 1890. The size of the margin in 1896 may seem surprising, but referring back to Table IV we find that wholesale prices decreased much more than retail, so that the margin must have increased between them. In the case of prunes the wholesale quotation is for a cheaper grade, but there seems to be a fairly constant relation between the different grades of prunes, and it is thus probable that the figures given represent the course of the prices quite accurately. Referring to the list we see that in 1907 as compared with 1890 the percentage of gross profit has increased in the case of evaporated apples, beans, dairy butter, cornmeal, eggs, prunes, rice, and sugar; it has decreased in the case of bread, creamery butter, cheese, milk, molasses, and vinegar. Beans, prunes, rice, and sugar were lower in price in 1907 than in 1890.

Chicago concerns us next. Here there was difficulty in getting wholesale quotations to cover the same years as were covered in the case of New York City. The retail prices are taken from the *Bulletin of the Bureau of Labor*, No. 77. The wholesale prices are those of a prominent jobber in Chicago. In this case we are confronted with a wealth of quotations. We cannot know what grade or in what quantity the retailer purchased. In each case one grade of the commodity was taken and the price for the same quantity was used throughout. With this method the absolute

TABLE VII  
CHICAGO WHOLESALE AND RETAIL

	1904	1907
Retail: Evaporated apples, per lb.....	\$0.1042	\$0.1200
Wholesale: Evaporated apples, per lb.....	.0677	.0944
Margin.....	.0365	.0256
Percentage of gross profit.....	53.9	27.1
Retail: Codfish, per lb.....	.1000	.1208
Wholesale: Codfish, per lb.....	.0663	.0648
Margin.....	.0337	.0560
Percentage of gross profit.....	50.8	86.4
Retail: Cornmeal, white, per lb.....	.0250	.0275
Wholesale: Cornmeal, white, per lb.....	.0140	.0152
Margin.....	.0110	.0123
Percentage of gross profit.....	78.6	80.9
Retail: Cornmeal, yellow, per lb.....	.0250	.0250
Wholesale: Cornmeal, yellow, per lb.....	.0132	.0147
Margin.....	.0118	.0103
Percentage of gross profit.....	89.4	70.1
Retail: Beans, per bu. (by qt.).....	2.9866	3.0048
Wholesale: Beans, per bu.....	1.9225	1.7496
Margin.....	1.0641	1.2552
Percentage of gross profit.....	54.8	71.7
Retail: Whitefish, No 1, per lb.....	.0963	.1542
Wholesale: Whitefish, No. 1, per lb.....	.0661	.0833
Margin.....	.0302	.0709
Percentage of gross profit.....	45.7	85.1
Retail: F. C. Cheese, per lb.....	.1512	.1888
Wholesale: F. C. cheese, per lb.....	.1198	.1622
Margin.....	.0314	.0266
Percentage of gross profit.....	26.2	16.4
Retail: N. O. molasses, per gal.....	.5375	.5917
Wholesale: N. O. molasses, per gal.....	.3300	.3550
Margin.....	.2075	.2367
Percentage of gross profit.....	62.9	66.7
Retail: Japan tea, per lb.....	.5000	.4833
Wholesale: Japan tea, per lb.....	.3000	.3000
Margin.....	.2000	.1833
Percentage of gross profit.....	66.7	61.1
Retail: Santos coffee.....	.1600	.2000
Wholesale: Santos coffee.....	.1413	.1450
Margin.....	.0187	.0550
Percentage of gross profit.....	13.2	37.9
Retail: Rice, per lb.....	.0900	.1000
Wholesale: Rice, per lb.....	.0621	.0735
Margin.....	.0279	.0265
Percentage of gross profit.....	44.9	36.1
Retail: Vinegar, white wine, per gal.....	.1625	.1875
Wholesale: Vinegar, white wine, per gal.....	.0600	.0652
Margin.....	.1025	.1223
Percentage of gross profit.....	170.8	187.6

TABLE VIII  
CHICAGO WHOLESALE AND RETAIL MEAT PRICES

	DURING FIRST SIX MONTHS OF	
	1905	1909
Retail: Rib roast, per lb.....	.20	.22
Wholesale: Rib roast, per lb.....	.14 $\frac{1}{2}$	.14
Margin.....	.05 $\frac{1}{2}$	.08
Percentage of gross profit.....	42.0	57.1
Retail: Sirloin steak, per lb.....	.20	.25
Wholesale: Sirloin steak, per lb.....	.17 $\frac{1}{2}$	.17 $\frac{1}{8}$
Margin.....	.02 $\frac{1}{2}$	.07 $\frac{3}{8}$
Percentage of gross profit.....	14.3	45.6
Retail: Round steak, per lb.....	.12 $\frac{1}{2}$	.16
Wholesale: Round steak, per lb.....	.07 $\frac{3}{4}$	.08 $\frac{7}{8}$
Margin.....	.04 $\frac{3}{4}$	.07 $\frac{1}{8}$
Percentage of gross profit.....	60.2	80.3
Retail: Leg of mutton, per lb.....	.12 $\frac{1}{4}$	.15
Wholesale: Leg of mutton, per lb.....	.10 $\frac{1}{2}$	.12 $\frac{1}{8}$
Margin.....	.02 $\frac{1}{4}$	.02 $\frac{3}{8}$
Percentage of gross profit.....	21.5	23.3
Retail: Pork chops, per lb.....	.11	.15 $\frac{3}{4}$
Wholesale: Pork chops, per lb.....	.08 $\frac{3}{4}$	.11 $\frac{7}{8}$
Margin.....	.02 $\frac{1}{4}$	.04 $\frac{3}{4}$
Percentage of gross profit.....	25.7	38.7

margin cannot claim much significance, for the retailer may have purchased a higher or lower grade or in larger or smaller quantities; but granting all this, the percentage of gross profit is significant. The wholesale quotations were obtained by averaging twelve monthly quotations. The results are given in Table VII. It will be seen that from the year 1904 to the year 1907, the percentage of gross profit increased in the cases of seven of the twelve articles quoted, namely, codfish, white cornmeal, beans, whitefish, molasses, coffee, and vinegar. Evaporated apples, yellow cornmeal, cheese, tea, and rice showed a decreased margin of gross profit. Tea is the only article which was absolutely lower in price in 1907 than in 1904. The Russo-Japanese War may have had some effect on the price in 1904.

The next bit of evidence concerns meat prices in Chicago. In the *National Provisioner* are given wholesale and retail prices of meat in Chicago. The retail prices are given with a full understanding of the difficulty of attempting to give an average retail price. In the wholesale price list are given prices for the various

cuts of the animals. Since it is the highest class of retail trade in which the cuts rather than the half or quarter of the animal is bought, in making the comparison the highest price of the cuts at wholesale has been taken and compared with the highest price at retail. Monthly quotations were taken, and the average of six given in each case. This is shown in Table VIII. The evidence seems to be very clear. In every case both the absolute margin and the percentage of gross profit have increased in the first half of 1909 over what they respectively were in the first half of 1905.

A retail grocer who was interviewed gave some interesting information about the retail business. It is given here merely as the statement of a man who ought to know what he is talking about. His store is a prosperous one in a good residence district of Chicago and caters to high-class trade. He mentioned several things which tended to make prices high. The delivery service was particularly emphasized. The gross profit of the store (figured on the sales) was 16 to 17 per cent. That is, if we should take 83 or 84 per cent. of the total sales we should get the wholesale cost of the goods. For last year the delivery expense amounted to 5 per cent. of the retail sales—that is, almost a third of the margin between the wholesale and retail prices was absorbed by the cost of delivery. An examination of the records had shown that sometimes as many as six trips had been made to a given customer in a single day. The telephone expense was also very great. The spread of advertised package goods has resulted in higher prices. Soda crackers when bought in a package cost sixteen cents a pound, while they used to be sold, in bulk, three pounds for a quarter. The grocer said that butter, eggs, and sugar did not really pay the cost of handling them and that on ordinary staples the margin had not advanced in spite of increased expenses. To offset this there had grown up a trade in fruits and vegetables all the year around. On this he admitted that there was a good profit. It will be noted that none of this class of goods was included in any of the retail prices given above. Part of the fruit business was in California fruit and part in cold-storage fruit. In the latter there is a considerable speculative element which is responsible for a certain amount of the high price.

The general conclusion seems to be that except in the case of meat, the retailers' margin in the great staples has remained about

the same. So we end with the farmer as we began with him. The cost of living is high because farm products are high. Why farm products are high remains to be explained.<sup>2</sup>

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<sup>2</sup> These two quotations may be of interest in showing how our situation compares with that of England and France:

"As regards the movement of retail prices, the only available data are those relating to London. The general level of retail prices of commodities in London in the year 1907 was about 1 per cent. higher than in the year 1905."—*Report of Board of Trade on the Cost of Living of the Working Classes*, p. xli (London, 1908).

"On the whole the average increase between October, 1905, and October, 1907, in the expenditure of a French working-class family on foods other than meat, owing to these changes, may be estimated at approximately 4½ per cent.; and on food of all kinds, including meat, the rise would be slightly under 5 per cent."—*Board of Trade Enquiry on Cost of Living in French Towns*, p. xxx (London, 1909).